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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/686,909

10/15/2003

Juan C. Vives

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EXAMINER

MARINI, MATTHEW G

ART UNIT	PAPER NUMBER
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2854

MAIL DATE	DELIVERY MODE
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05/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/686,909	Applicant(s) VIVES ET AL.	
	Examiner Matthew G. Marini	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/13/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 1/13/06 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

Claims 52 and 54 are objected to because of the following informalities:

RY It appears that in claim 52 line two, the phrase "around said pulley" should read --
around one ^{of} said pulleys-- as to referrer back to the pair.

It appears in claim 54, line 2, "said printhead" lacks proper antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 43-51, and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright et al. (5,456,539).

As for claim 43, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, comprising: printing units, 8b and 9b, disposed on a closed print head path, A; and a print medium feed unit, PFA as seen in Fig. 1, adapted to feed at least one print medium, P, through said closed print head path, A and B, Col. 2 lines 44-51, said at least one print medium, P, including two or more print surfaces, front and back; wherein said printing units, 8b and 9b, are adapted to travel along said closed print head path, A and B, via belt 6, to print on at least two print surfaces, Col. 1 lines 38-40.

As for claim 44, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, wherein said printing units, 8b and 9b, are adapted to print identical information on each of said at least two print surfaces, P, as read in Col. 4 lines 42-46.

As for claim 45, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, wherein said printing units, 8b and 9b, are adapted to print different information on each of said at least two print surfaces, P, as read in Col. 4 lines 42-46.

As for claim 46, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, wherein said print medium feed unit, PFA, is adapted to feed a single print medium, P, and wherein said printing units, 8b and 9b, are adapted to print on two sides of said single print medium, Col. 1 lines 38-40.

As for claim 47, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, wherein said printing units, 8b and 9b, are adapted to travel in a single direction along said closed print head paths, A and B, Col. 3 lines 37-43.

As for claim 48, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, wherein said closed print head paths, A and B are oblong in a print medium feed direction.

As for claim 49, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, further comprising a drive system, motor, 2, gears, 3 and 4, belt, 6, and pulleys, 5, adapted to carry said printing units, 8b and 9b, along said closed print head paths, A and B.

As for claim 50, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, includes a drive belt, 6, and a pair of opposing pulleys, 5, said printing units, 8b and 9b, being engaged to said drive belt, 6.

As for claim 51, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, include a drive pulley mounted to drive gear, 4, for driving the belt, 6, and an idler pulley, mounted to the left of drive gear, 4, for stabilizing the belt, 6.

As for claim 53, Wright et al. teaches in Fig. 2, a system for simultaneously printing on two or more media surfaces, as read in lines 1-2 in the Abstract, includes

means for electrically communicating with a print controller as said printing unit travels along said closed print head path, Col. 4 lines 34-41.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (5,456,539) in view of Inoue et al. (JP 04310770).

As for claim 52, Wright et al. teaches all that is claimed in the above rejection of claim 50, except where the pair of pulleys are adapted to allow the printing units to pass around the pulley to travel along said closed print head path. Inoue et al. teaches in Fig. 1a and 1e, a pair of pulleys, 48, adapted to allow the printing unit, 12, to pass around at least one of the pulleys to travel along said closed print head path defined by belt, 49. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Wright et al. belt assembly to allow a print unit to pass around at least on of the pulleys as taught by Inoue et al. in Fig. 1 because it reduces the need for two print units, reducing the overall size and cost of the device seen in Wright et al.

Claims 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (5,456,539) in view of Burikov et al. (6,341,839).

As for claim 54, Wright et al. teaches all that is claimed in the above rejection of claim 53, except where conductive brushes extend from the print head, said brushes

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being adapted to communicate with a conductive bus positioned around said closed print head path. Burikov et al. teaches in Fig. 2, a device similar in structure to Wright et al., where conductive brushes, 15, extend from a print head, 2, said brushes, 15, being adapted to communicate with a conductive bus, 9, via brushes, 14, positioned around said closed print head path, Col. 4 lines 6-12. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Wright et al. to include the brushes and bus taught by Bruikov et al. because the brushes and bus will reduce the complexity of wires and connectors powering the moving print heads taught by Wright et al. making replacement and maintenance of parts simpler.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Marini whose telephone number is (571)-272-2676. The examiner can normally be reached on Monday-Friday 8:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew Marini



05/1/07



Ren Yan
Primary Examiner